

What Is Claimed Is:

1. A liquid crystal display device for implementing a liquid crystal display by inputting image data for achieving a gray shade display, comprising:

image data inputting means for inputting image data; image data memory for storing image data comprising a number of bits which is fewer than the number of bits in the image data input to said image data inputting means, on the basis of this image data;

corrected data generating means for generating corrected data by correcting the current image data input to said image data inputting means, on the basis of previous image data stored in said image data memory; and

liquid crystal driving means for inputting said corrected data and driving liquid crystals.

2. The liquid crystal display device in accordance with claim 1, wherein said image data memory stores image data comprising a number of bits that is fewer than the number of bits in the image data input to said image data inputting means, by extracting the most significant bits of the image data input to said image data inputting means.

3. The liquid crystal display device in accordance with claim 1, wherein said corrected data generating means comprises a reference table which associates previous image data, current image data and corrected data, and generates corrected data by using said reference table.

4. The liquid crystal display device in accordance with claim 1, wherein the number of bits of image data stored in said image data memory is set on the basis of the gray scale data and the display luminosity characteristics of the liquid crystal display device.

5. The liquid crystal display device in accordance with claim 3, wherein the reference table provided in said corrected data generating means is set on the basis of the gray scale data and display luminosity characteristics of the liquid crystal display device.

6. The liquid crystal display device in accordance with claim 1, wherein said corrected data generating means generates corrected data having the same number of bits as the image data stored in said image data memory; and

    said liquid crystal display device further comprises computing means for generating corrected data having the same number of bits as the current image data, on the basis of the corrected data generated by said corrected data generating means, and the whole of, or a portion of, the current image data, and outputting the corrected data to said liquid crystal driving means.

7. The liquid crystal display device in accordance with claim 6, wherein said corrected data generating means generates corrected data by inputting most significant bits of the current image data comprising a number of most significant bits that is fewer than the number of bits for gray shade

display and equal to or greater than the number of bits of image data stored in said image data memory.

8. The liquid crystal display device in accordance with claim 6, wherein said computing means generates said corrected data by inputting least significant bits of the current image data comprising a number of least significant bits equal to the number of bits of current image data input to said image data inputting means minus the number of bits of corrected data generated by said corrected data generating means.

9. The liquid crystal display device in accordance with claim 1, further comprising:

first data converting means for converting image data consisting of RGB data into Yuv data; and

second data converting means for converting Yuv data into RGB data;

wherein said first data converting means converts the image data input to said image data inputting means, into Yuv data, and outputs same to said image data memory;

said image data memory stores the Yuv data converted by said first data converting means; and

said second data converting means outputs the Yuv data stored in said image data memory to said corrected data generating means, as previous image data.

10. A drive circuit for a liquid crystal display device for implementing a liquid crystal display by inputting image data for achieving a gray shade display, comprising:

image data inputting means for inputting image data;  
image data memory for storing image data comprising  
a number of bits which is fewer than the number of bits in the  
image data input to said image data inputting means, on the  
basis of this image data;

corrected data generating means for generating corrected data by correcting the current image data input to said image data inputting means, on the basis of previous image data stored in said image data memory; and

liquid crystal driving means for inputting said corrected data and driving liquid crystals.

11. The drive circuit device in accordance with claim 10,  
wherein said image data memory stores image data comprising a  
number of bits that is fewer than the number of bits in the  
image data input to said image data inputting means, by  
extracting the most significant bits of the image data input  
to said image data inputting means.

12. The drive circuit device in accordance with claim 10,  
wherein said corrected data generating means comprises a  
reference table which associates previous image data, current  
image data and corrected data, and generates corrected data by  
using said reference table.

13. The drive circuit device in accordance with claim 10,  
wherein the number of bits of image data stored in said image  
data memory is set on the basis of the gray scale data and the

display luminosity characteristics of the liquid crystal display device.

14. The drive circuit device in accordance with claim 12, wherein the reference table provided in said corrected data generating means is set on the basis of the gray scale data and display luminosity characteristics of the liquid crystal display device.

15. The drive circuit device in accordance with claim 10, wherein said corrected data generating means generates corrected data having the same number of bits as the image data stored in said image data memory; and

    said liquid crystal display device further comprises computing means for generating corrected data having the same number of bits as the current image data, on the basis of the corrected data generated by said corrected data generating means, and the whole of, or a portion of, the current image data, and outputting the corrected data to said liquid crystal driving means.

16. The drive circuit device in accordance with claim 15, wherein said corrected data generating means generates corrected data by inputting most significant bits of the current image data comprising a number of most significant bits that is fewer than the number of bits for gray shade display and equal to or greater than the number of bits of image data stored in said image data memory.

17. The drive circuit device in accordance with claim 15, wherein said computing means generates said corrected data by inputting least significant bits of the current image data comprising a number of least significant bits equal to the number of bits of current image data input to said image data inputting means minus the number of bits of corrected data generated by said corrected data generating means.

18. The drive circuit device in accordance with claim 10, further comprising:

first data converting means for converting image data consisting of RGB data into Yuv data; and

second data converting means for converting Yuv data into RGB data;

wherein said first data converting means converts the image data input to said image data inputting means, into Yuv data, and outputs same to said image data memory;

said image data memory stores the Yuv data converted by said first data converting means; and

said second data converting means outputs the Yuv data stored in said image data memory to said corrected data generating means, as previous image data.